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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/039,016	GLENN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Khanh Tran	2611	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed on 07/11/2006.
2. ☒ The allowed claim(s) is/are 1, 3, 6, 9-17, 21-25 and 27, which have been renumbered as set forth in the Office action.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

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1. The Amendment filed on 07/11/2006 has been entered. Claims 1, 3, 6, 9-17, 21-25 and 27 are pending in this Office action.

2. Claims have been renumbered as shown below, respectively:

- claim 3 renumbered as claim 2;
- claim 6 renumbered as claim 3;
- claim 12 renumbered as claim 4;
- claims 14-16 renumbered as claims 5-7;
- claims 9-11 renumbered as claims 8-10;
- claim 13 renumbered as claim 11;
- claim 17 renumbered as claim 12;
- claims 21-25 renumbered as claims 13-17; and
- claim 27 renumbered as claim 18.

### ***Response to Arguments***

3. Applicant's arguments, see pages 9-10 in Applicants' Remarks, filed on 07/11/2006, with respect to claims 1, 3, 17, 25 and 27 have been fully considered and are persuasive after Applicants amended claims 1, 3, 17, 25 and 27 and cancelled claim 18. The rejection of claims 1, 3, 17, 25 and 27 has been withdrawn.

**Reasons for Allowance**

The following is an examiner's statement of reasons for allowance:

4. Regarding claim 1, claim is allowed after claim has been amended to include uniquely distinct features "the phase controller having a plurality of voltage controllers each with its own charge storage circuitry to generate the interrelated control signals".

5. Regarding claim 9, claim is allowed because the claim include allowable limitations as recited in the last Office action "wherein said phase controller comprises a first phase control circuit to generate a first interrelated control signal of the interrelated control signals and a second phase control circuit to generate a second interrelated control signal of the interrelated control signals, wherein the second interrelated control signal decreases in amplitude at substantially the same rate as the first interrelated control signal increases in amplitude".

6. Regarding claim 13, the claim include allowable limitations as recited in the last Office action "wherein said phase controller further comprises common mode feedback circuitry coupled with more than one phase control circuit to substantially compensate for changes in a common mode amplitude of managing interrelated control signals of the interrelated control signals".

7. Regarding claim 17, claim is allowed after claim has been amended to include uniquely distinct features "generating, based upon said comparing, a charge signal to increase an amplitude of a first interrelated control signal of the interrelated control signals substantially simultaneously with generating a discharge signal to decrease an amplitude of a second interrelated control signal of the interrelated control signals".

8. Regarding claim 21, claim is allowed after claim has been amended to include allowable features "wherein said generating interrelated control signals comprises generating a first control signal and a second control signal to adjust the amplitude contributions from a first phase and a second phase of the phases of the reference clock signal, wherein adjustments to the amplitude contributions of the first phase and the second phase are substantially inversely proportional".

9. Regarding claim 22, claim is allowed after claim has been amended to include allowable features "wherein said generating interrelated control signals comprises generating a first ramping control signal and a second ramping control signal, wherein an amplitude of the first ramping control signal increases at a rate substantially equivalent to a rate that an amplitude of the second ramping control signal decreases".

10. Regarding claim 23, claim is allowed after claim has been amended to include allowable features "generating differential signals with at least one of the phases of the reference clock signal, based upon the interrelated control signals and filtering the

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differential signals to change the phase of the recovered clock signal with the analog transition".

11. Regarding claim 25, claim is allowed after claim has been amended to include allowable features "said phase controller comprises a first phase control circuit to generate a first interrelated control signal of the interrelated control signals and a second phase control circuit to generate a second interrelated control signal of the interrelated control signals, wherein the second interrelated control signal decreases in amplitude at substantially the same rate as the first interrelated control signal increases in amplitude".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Tran whose telephone number is 571-272-3007. The examiner can normally be reached on Monday - Friday from 08:00 AM - 05:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KCT

*Khánh Cong Tran*

08/17/2006

Primary Examiner KHANH TRAN